The rain at Beaumont began shortly after midnight of the 17th and ended about noon of the 18th. A stick measurement at 7 a. m. showed 0.78 inch; the rain continued falling lightly until 7:30 a. m., being shortly before this time when the first thunder was heard; then the torrential rain began and continued until 10 a. m. It was stated that practically the entire amount of rain fell during the two and one-half hour period from 7:30 a. m. to 10 a. m.

Streets were flooded to a depth of 1 to 5 feet, the water backing into business houses and causing considerable damage to the contents. No automatic gauge record was obtainable at Beaumont, but an idea of the volume of water that fell can be had from a description of the topography. It is situated on a level country on the west bank of the Neches River, with a natural slope toward the river. Although with the natural drainage and the sewerage system the city was flooded, as stated above and shown by Figure 1, which was taken on Pearl Street about 300 yards from the river.

Street car and interurban traffic were completely demoralized for five hours, and where streets were paved with wooden blocks swelling took place, and the blocks buckled and floated away. During the storm lightning struck several buildings in the city and an oil-storage tank at a near-by refinery, burning all the oil in the tank. Total damage was estimated at $500,000, practically all from water.

One death was reported. A negro riding horseback was drowned when the horse fell with him in a large drainage ditch near El Vista, Tex., which is a few miles south of Beaumont.

At Port Arthur a light rain fell from 4:28 a. m. to 6:57 a. m.; first thunder was heard in the west at 5:50 a. m. Rain began falling again at 7:40 a. m. and ended at 1:14 p. m.; during this time 5.37 inches was recorded. There were two excessive periods, the first from 9:20 a. m. to 10:24 a. m., 3.25 inches falling, and the second from 11:02 a. m. to 11:41 a. m., 1.86 inches falling. It is evident from the changes in wind direction that two thunderstorms passed over the station in rapid succession. Rainfall was heaviest during the first storm; accumulated depths during excessive rate were 1.27 inches in 15 minutes, 2.11 inches in 30 minutes, and 3.11 inches in 1 hour.

No damage occurred in Port Arthur; the water did not obtain any great depths and all disappeared soon after the storm passed, except in the western part of the city, where it was left standing for several hours, due to an accident to one of the drainage pumps.

THE CLONMEL TORNADO OF MAY 22, 1923.

By JAMES W. ARNOLD, Observer.

[Weather Bureau Office, Wichita, Kans., June 4, 1923.]

On the evening of May 22, 1923, a tornado occurred in the vicinity of the Wichita station, injuring 5 people, causing property damage in excess of $100,000, and crop damage which can not be estimated at the present time.

The first evidence of the tornado was near Viola, Kans., approximately 23 miles southwest of the Wichita station. Assuming a north-northeast to northeast direction it struck again at a point about 4 miles southwest of Clonmel, continuing to a point about 4 miles northeast of the latter place. Here it lifted and no further evidence of damage to buildings was found until the vicinity of Twenty-ninth Street and Arkansas and Lawrence Avenues, North Wichita, was reached, where it dipped down to earth again, causing injury to people and property damage.

The total length of its path was about 30 miles and its width 1 mile. The length of the path of greatest destruction in the Clonmel vicinity was 7 to 8 miles, the center of the path passing through the center of the village, while in North Wichita the length was about 1 mile.

A distinct funnel-shaped cloud was seen by residents of Clonmel and the direction of the prostrated trees indicates that the storm was of tornadic character. No one in the vicinity of North Wichita saw a funnel-shaped cloud, but two persons who have seen other tornadoes said they heard the distinct roar which accompanies them.

The rate of travel was slightly less than 60 miles per hour. A clock at Clonmel, damaged by the storm, stopped at 8:55 p. m., while one at Wichita, also broken by the storm, stopped at 9:30 p. m. The distance traversed in 35 minutes being about 30 miles.

In the Clonmel section about 12 farmsteads were damaged and practically every building in the village was damaged. The total property loss was about $50,000 and crop damage can not be estimated, although about 10 per cent of the corn and 60 per cent of the kaffir and feed crops may have to be replanted. The crop damage was not confined to sections where the tornado did property damage, but all along the 30 mile path crops were harmed considerably. In many places in the near vicinity of Wichita the apple crop will be an entire loss, while plums and other fruits suffered. Gardens along the path were ruined by the hail and rain which accompanied the tornado. During the two hours from 9 p. m. to 11 p. m. 0.75 inch of rain fell at the Wichita station, accompanied by two periods in which hail fell. The property damage in Wichita was estimated to be about $50,000.

The barograph trace at the Wichita station shows no fall in pressure at the time of the passing of the tornado, but instead shows a sudden rise of 0.10 of an inch. It is thought this is due to the fact that the tornado did not dip to the earth until it had passed by the station.

VEERING OR BACKING WINDS AS INDICATING THE WEATHER.

E. P. JONES, Meteorologist.

[Weather Bureau Office, Portland, Me., May 3, 1923.]

In order to verify the general belief that when precipitation along the Maine coast ceases with veering winds a longer period of fair weather follows than when the ending of precipitation is attended by backing winds, a careful study of wind direction in relation to precipitation from November 1, 1922, to March 30, 1923, resulted in proof that the validity of this assumption is not sustained by fact, as may be seen from the accompanying table.

Rain or snow was more often followed by backing winds, while the period of fair weather before the next following precipitation was somewhat longer after backing winds.

	Number of times wind—		Average period before next following precipitation.	
	Veered.	Backed.	After veering.	After backing.
November	1	3	114 hours or 4.8 days	96 hours or 4 days.
December	3	9	30 hours or 1.2 days	60 hours or 2.5 days.
January	5	5	30 hours or 1.2 days	28 hours or 2.8 days.
February	3	5	48 hours or 2 days	81 hours or 3.4 days.
March	8	6	52 hours or 2.2 days	42 hours or 1.8 days.
Total	20	28		
Average	4	6	55 hours or 2.5 days	69 hours or 2.9 days.